

**What is claimed:**

1. A method of synchronizing messages between a first system and a second system, comprising the steps of:

- 5        retrieving a first folder hierarchy from the first system;  
      retrieving a second folder hierarchy from the second system;  
      synchronizing the second folder hierarchy to the first folder hierarchy;  
      retrieving a first plurality of messages from the first system, the first  
plurality of messages being stored in folders within the first folder hierarchy;  
10       retrieving a second plurality of messages from the second system, the  
second plurality of messages being stored in folders within the second folder  
hierarchy;  
      comparing the first plurality of messages to the second plurality of  
messages to identify common messages stored in both the first and second  
15       folder hierarchies;  
      determining whether any of the common messages are stored in  
different folders in the first and second folder hierarchies; and  
      if a common message is located in different folders of the first and  
second folder hierarchies, then synchronizing the messages by moving the  
20       common message to a new folder within the first folder hierarchy or by  
moving the common message to a new folder within the second folder  
hierarchy.

2. The method of claim 1, further comprising the step of initiating  
25       communication between the first and second systems by electrically coupling  
the first system to the second system.

3. The method of claim 1, further comprising the step of initiating  
30       communicating between the first and second systems by opening a connecting  
via a wireless data communication network.

4. The method of claim 1, wherein the first system is a host system and the second system is a mobile data communication device.
- 5 5. The method of claim 4, further comprising the step of providing a wireless data communication network for enabling communications between the host system and the mobile data communication device.
6. The method of claim 1, wherein the synchronizing the second folder hierarchy to the first folder hierarchy step further includes the steps of:
- 10 associating a unique folder ID with each folder in the first and second folder hierarchies;
- generating a folder list including the folder IDs of the folders in the first folder hierarchy;
- 15 providing the folder list to the second system; and
- updating the second folder hierarchy to match the first folder hierarchy using the information contained in the folder list.
7. The method of claim 1, wherein the comparing step further includes the steps of:
- 20 associating a unique message ID with each message stored in the first and second systems;
- comparing the message IDs of the messages retrieved from the first system with the message IDs of the messages retrieved from the second system in order to determine if any common messages are stored on the first and second systems.
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8. The method of claim 1, further comprising the steps of:
- receiving a new message at the first system;
- 30 associating a unique message ID with the new message; and
- transmitting the new message to the second system.

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9. The method of claim 8, further comprising the steps of:  
receiving the new message at the second system; and  
storing the new message in a first folder within the second folder  
5 hierarchy at the second system.
10. The method of claim 8, further comprising the steps of:  
storing the new message into a first folder within the first folder  
hierarchy at the first system, wherein the first folder within the first folder  
10 hierarchy is associated with the first folder within the second folder hierarchy.
11. The method of claim 10, wherein the first folders are inbox folders.
12. The method of claim 11, further comprising the steps of:  
15 moving the new message to a second folder within the second folder  
hierarchy;  
associating a folder ID of the second folder with the new message; and  
setting a move flag within the new message to indicate that the new  
message has been moved to the second folder.  
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13. The method of claim 1, wherein the determining step further includes the  
steps of:  
associating a folder ID with each message stored in the first and second  
folder hierarchies, wherein the folder ID identifies the folder location of each  
25 message within the respective folder hierarchy, and wherein associated folders  
in the first and second hierarchies are identified by the same folder ID; and  
comparing the folder IDs of any common messages to determine  
whether the common messages are stored in the same folders within the first  
and second folder hierarchies.  
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14. A method of synchronizing messages stored in a folder hierarchy at a host

system and a corresponding folder hierarchy at a mobile data communication device, comprising the steps of:

- receiving a message at the host system;
- storing the message in a first folder of the folder hierarchy at the host system;
- transmitting the message to the mobile data communication device;
- storing the message in a first folder of the folder hierarchy at the mobile data communication device;
- moving the message from the first folder to a second folder at the mobile data communication device;
- coupling the mobile data communication device to the host system;
- detecting that the message has been moved to the second folder at the mobile data communication device; and
- in response to the detection step, moving the message from the first folder at the host system to a second folder of the folder hierarchy at the host system that corresponds to the second folder of the folder hierarchy at the mobile data communication device.

15. A method of synchronizing messages stored in a folder hierarchy at a host system and a corresponding folder hierarchy at a mobile data communication device, comprising the steps of:
- receiving a message at the host system;
  - storing the message in a first folder of the folder hierarchy at the host system;
  - transmitting the message to the mobile data communication device;
  - storing the message in a first folder of the folder hierarchy at the mobile data communication device;
  - moving the message from the first folder to a second folder at the mobile data communication device;
  - transmitting a move message from the mobile data communication device to the host system indicating that the message has been moved to the

second folder at the mobile data communication device; and

receiving the move message at the host system and moving the message stored in the first folder at the host system to a second folder at the host system that corresponds to the second folder at the mobile data communication device.

16. A method of synchronizing a first device to a second device, comprising the steps of:

providing a first folder hierarchy at the first device;

providing a second folder hierarchy at the second device;

synchronizing the second folder hierarchy to the first folder hierarchy;

retrieving a first plurality of messages stored within the first folder hierarchy and retrieving a second plurality of messages stored within the second folder hierarchy, wherein at least one of the first plurality of messages and at least one of the second plurality of messages are common messages;

determining whether the common messages are stored in similar folders within the first and second folder hierarchies; and

if the common messages are not stored in similar folders, then synchronizing the common messages so that they are stored in similar folders within the first and second folder hierarchies.

17. A method of synchronizing a first device to a second device, comprising the steps of:

providing a first folder hierarchy at the first device;

providing a second folder hierarchy at the second device;

retrieving a first plurality of messages stored within the first folder hierarchy and retrieving a second plurality of messages stored within the second folder hierarchy;

determining whether the first device executed an operation on a message stored in the first folder hierarchy, and if so, then executing the same operation on a corresponding message stored in the second folder hierarchy at the second device.

18. A method for mirroring a data store within a first device to a data store within a second device, comprising the steps of:
  - providing a first folder hierarchy within the data store of a first device;
  - 5 providing a second folder hierarchy within the data store of a second device;
  - redirecting a plurality of data items from the first system each with associated folder hierarchy information;
  - filing the redirected data items from the first system within the data
  - 10 store of the second system following the hierarchy information provided;
  - returning command signals back to the first system from the second system when data items are moved from the original filed folder hierarchy; and
  - moving the data items within the first folder hierarchy as indicated by
  - 15 the command signals so they match the updated folder of those same data items on the second system in such a way that first and second system mirror each others format and filing structure.
19. A method of real-time synchronization between folder hierarchies,
  - 20 comprising the steps of:
    - detecting and transmitting every folder change from a host system to a mobile device,
    - detecting and transmitting every folder change from a mobile system to a host system,
    - 25 synchronizing every folder change on the host and mobile systems in such a way as to maximize the mirroring of the two systems data storage areas for those parts of the data store that are shared.
20. A method of redirecting data between a first device and a second device,
  - 30 comprising the steps of:
    - providing a first storage hierarchy at the first device;

providing a second storage hierarchy at the second device;  
redirecting a plurality of data items from the first device to the second device, each data item including a location indicator within the first storage hierarchy;

5 storing the redirected data items in corresponding locations within the second storage hierarchy using the location indicators.

21. The method of claim 20, further comprising the step of synchronizing the second folder hierarchy to the first folder hierarchy.

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22. A system for synchronizing messages between a first device and a second device, comprising:

a pair of matching folders, one of the pair of matching folders being located on the first

15 device, the other of the pair of matching folders being located on the second device;

a pair of matching messages, one of the pair of matching messages being located on the

20 first device, the other of the pair of matching messages being located on the second device; and

means for moving the pair of messages such that if one of the pair of matching messages is moved to one of the pair of matching folders, the other matching message is moved to the other matching folder.

25 23. The system of claim 22, wherein the first device is a host system and the second device is a mobile data communications device.

24. The system of claim 22, wherein each pair of matching messages has a unique message ID such that the means for moving comprises means for  
30 matching the unique message IDs of the message on the first device to the message on the second device by matching the unique message IDs.

25. A method of indicating at a host system a state of a message at a mobile communications device, the method comprising of the following steps:

5 (A) altering the state of a first message at the mobile communications device thereby creating an altered state;

(B) forwarding a status signal to the host system; and,

10 (C) changing at the host system a first message status icon based on the altered state at the mobile communications device.

26. The method of claim 25, wherein step (A) is the act of forwarding the first message from the mobile communication device.

15 27. The method of claim 25, wherein step (A) is the act of replying to the first message from the mobile communication device.

20 28. The method of claim 25, wherein step (A) is the act of reading the first message at the mobile communications device.

29. The method of claim 26, wherein step (C) results in the first message status icon representing a graphical representation of at least the forwarded state.

25 30. The method of claim 26, wherein step (C) results in the first message status icon representing a graphical representation of at least the replied state.

30 31. The method of claim 26, wherein step (C) results in the first message status icon representing a graphical representation of at least the read state.



32. The method of claim 26, wherein step (C) results in the first message status icon icon representing a graphical representation that at least the mobile device has acted upon the message in any way.

5 33. The method of claim 25, wherein the mobile communications device is a PDA.

34. The method of claim 25, wherein the mobile communications device is a pager.

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36. The method of claim 25, wherein the mobile communications device is a two-way pager.

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37. The method of claim 25, wherein the mobile communications device is a cellular telephone.

38. The method of claim 25, wherein the mobile communications device is an Internet appliance.

20 39. A method of indicating at the host system the state of the message at the mobile communications device comprising of the following steps:

- (A) redirecting a first message from the host system to the mobile communications device, wherein the first message at the host system has a first message status icon;
- 25 (B) receiving the redirected first message from the host system at the mobile communications device;
- (C) altering the state of the first message at the mobile communications device thereby creating an altered state;
- (D) forwarding a status signal to the host system; and,
- 30 (E) changing at the host system the first message status icon based on the action taken at the mobile communications device.

40. The method of claim 39, wherein step (A) is the act of forwarding the first message from the mobile communication device.

5 41. The method of claim 39, wherein step (A) is the act of replying to the first message from the mobile communication device.

42. The method of claim 39, wherein step (A) is the act of reading the first message at the mobile communications device.

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43. The method of claim 40, wherein step (C) results in the first message status icon representing a graphical representation of at least the forwarded state.

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44. The method of claim 40 wherein step (C) results in the first message status icon representing a graphical representation of at least the replied state.

45. The method of claim 41, wherein step (C) results in the first message status icon representing a graphical representation of at least the read state.

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46. The method of claim 41, wherein step (C) results in the first message status icon icon representing a graphical representation that at least the mobile device has acted upon the message in any way.

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47. The method of claim 39, wherein the mobile communications device is a PDA.

48. The method of claim 39, wherein the mobile communication device is a pager.

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49. The method of claim 39, wherein the mobile communication device is a two-way pager.

50. The method of claim 39, wherein the mobile communication device is a  
5 cellular telephone.

51. The method of claim 39, wherein the mobile communication device is an Internet appliance

10 52. The method of claim 39, further comprising the steps of:  
(F) forwarding a read-receipt to a read-receipt requester's device.

53. The method of claim 51, wherein the requester's device is a mobile communication device.

15 54. The method of claim 51, wherein the requester's device is a personal computer.

55. The method of claim 51, wherein the requester's device is a two-way  
20 pager.

56. The method of claim 51, wherein the requester's device is a Internet appliance.